INTERNATIONAL SEARCH REPORT

Internation pplication No PCT/EP 03/12132

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 F28D9/00 F28F3/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

 $\begin{tabular}{ll} Minimum documentation searched & (classification system followed by classification symbols) \\ IPC 7 F28D F28F F24F \\ \end{tabular}$

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT						
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.				
Χ	GB 1 484 126 A (COVRAD LTD) 24 August 1977 (1977-08-24) page 1, line 76 -page 2, line 20 page 2, line 77 - line 90; figures 1,2,6	1,7-11				
X	GB 1 116 620 A (ASS ENG LTD) 6 June 1968 (1968-06-06) page 1, line 85 -page 2, line 94; figures 1,2	1-4,7-11				
X	US 4 227 571 A (TJADEN JAN) 14 October 1980 (1980-10-14) column 2, line 19 -column 4, line 2; figure 1	1-4				

Further documents are listed in the continuation of box C.	Patent family members are listed in annex.			
Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	 "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family 			
Date of the actual completion of the international search 26 March 2004	Date of mailing of the international search report 06/04/2004			
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Beltzung, F			

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Α	WO 83 03464 A (KVANUM PLATMEKANO) 13 October 1983 (1983-10-13) page 2, line 9 - line 25; figures 1-3	1
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A	EP 0 777 094 A (MITSUBISHI ELECTRIC CORP) 4 June 1997 (1997-06-04) cited in the application column 6, line 3 -column 17, line 36; figures 1-30	

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